

Committee on Earth Observation Satellites  
17<sup>th</sup> Plenary Meeting  
Colorado Springs, Colorado  
November 19-20, 2003

CEOS/17/Agency Report:  
NOAA

**Item 19.7**

## **U.S. National Oceanic and Atmospheric Administration (NOAA) Report**

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### **SUMMARY AND PURPOSE**

Herewith NOAA provides an update on its significant activities in 2003 in satellite and information services.

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### **ACTION PROPOSED**

Plenary participants are invited to take note of the information contained in this document.

# ***NOAA Accomplishments in Satellite and Information Services 2003***

## **Earth Observation Summit Leadership**

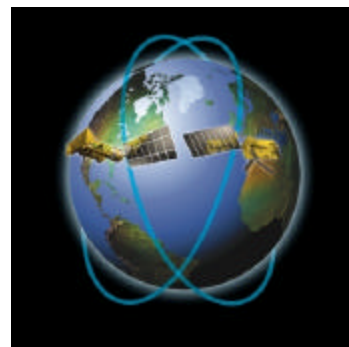


the organization of the first Earth Observation Summit, held in Washington, DC in July. Thirty-three countries and the European Commission participated, as well as over 20 international organizations. NOAA also played a major part in organizing the inaugural meeting of the follow-on Group on Earth Observations (GEO), held August 1-2. GEO was established to prepare a 10-year implementation plan for a coordinated, comprehensive, and sustained Earth observation system or systems. NOAA Administrator Conrad Lautenbacher was elected as one of four GEO co-chairs.

NOAA was instrumental in

## **Polar Cooperation with EUMETSAT**

NOAA signed with EUMETSAT a Joint Transition Activities Agreement, allowing the parties continued access to environmental data collected by each others' satellites and calling for the parties to begin preparing for a future joint polar system post-2020. NOAA and EUMETSAT are already collaborating under the Initial Joint Polar System (IJPS) agreement. The assumption of the mid-morning orbit by EUMETSAT under IJPS will begin in late 2005 when EUMETSAT's first polar satellite is launched, METOP-1. NOAA will continue to operate in the afternoon orbit.



EUMETSAT graphic of IJPS cooperation

## **Leadership in CEOS and IGOS**



NOAA Assistant Administrator Gregory Withee chaired CEOS and co-chaired IGOS, including the IGOS Partners Meeting (IGOS P-10) held in June in

Paris. During the year, NOAA represented CEOS and IGOS at many venues, in addition to leading the activities of each Secretariat. In November, NOAA is hosting the 17th CEOS Plenary in Colorado Springs, Colorado

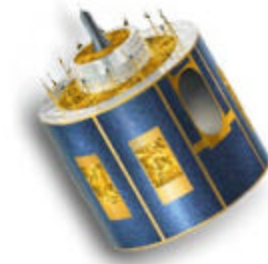
### **Geostationary Backup Agreement with Japan**

NOAA initiated actual backup of Japanese geostationary satellite GMS-5 with NOAA's Geostationary Operational Environmental Satellite-9 (GOES-9). This arrangement remains ongoing. NOAA's cooperation with the Japan Meteorological Agency (JMA) provides continuity of satellite services for Japan and the entire Western Pacific as well as U.S. civilian and military assets, and U.S. territories in the region.

### **Meteosat Second Generation Cooperation**

NOAA signed with EUMETSAT an agreement on access to data from Meteosat Second Generation (MSG). Under the agreement, NOAA and its U.S. affiliates will have access to the full set of MSG image data, subject to negotiated terms on use and redistribution of the data. MSG-1, launched in August 2002, represents a significant advancement in geostationary

Earth observing capabilities.



### **Agreement with Norwegian Space Center for NPP Support**



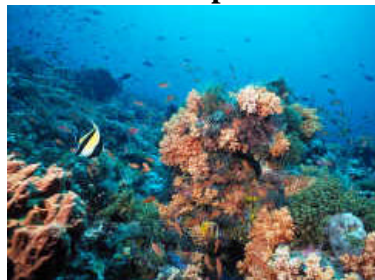
NOAA finalized the implementation of an agreement with the Norwegian Space Center for high-latitude satellite tracking and data acquisition support for the NPOESS Preparatory Program (NPP), scheduled for launch in late 2005/early 2006, and for NPOESS. NOAA also signed an agreement with NSC for the installation of fiber optical cable from the island of Svalbard to the Norwegian mainland, which will allow larger amounts of data from the NPP and NPOESS satellites to be transferred back to the United States at a greater rate of speed.

### **Strong NOAA Involvement in WSSD Follow-up**

On behalf of CEOS, NOAA organized a capacity-building workshop as follow-on to the World Summit on Sustainable Development (WSSD). The workshop will take place in Stellenbosch, South Africa in October. CEOS has a WSSD-recognized Type II partnership in "Earth Observation Education and Training," to facilitate education and training in satellite-based Earth observation techniques, data analysis, interpretation, use and application.



### **Coral Reef Cooperation in the IGOS Partnership**



NOAA, with the U.N.

Environmental Programme, led the development of the IGOS Coral Reef Sub-theme Report, which was approved by the IGOS Partners at their June meeting and released officially in September. A team of 16 members prepared the sub-theme report. At the June meeting, the IGOS Partnership also approved the development of the Coastal Theme into which the sub-theme will be integrated.

### **Hosted International Commercial Remote Sensing Symposium**



NOAA, which has the regulatory responsibility to license U.S. commercial

remote sensing systems, co-hosted with NASA and USGS an International Remote Sensing Symposium to discuss issues facing the commercial remote sensing industry. Attended by industry members, government officials, and international visitors, the Symposium coincided with the release by President Bush of a new commercial remote sensing policy directive.

### **Cooperation in International Climate Research**

NOAA was active in the U.S. delegation to the UN Framework Convention on Climate Change's Subsidiary Body on Scientific and Technical Advice. NOAA also represented the United States at a pre-session meeting on the Global Climate Observing System (GCOS) Second Adequacy Report.

### **New Cooperation with Meteorological Services Canada**

NOAA and Meteorological Services Canada (MSC) signed a Memorandum of Understanding on Cooperation in Environmental Data Acquisition and Utilization. Recognizing our long-standing cooperation, the MOU will act as an umbrella under which joint projects between NOAA and MSC can be undertaken. The first Annex to the MOU creates the North American Ice Service (NAIS), formalizing the nearly 20-year collaboration between the U.S. National Ice Center and the Canadian Ice Service.

### **NOAA and CONAE Joint Technical Workshop**

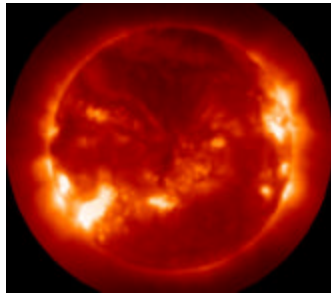
NOAA and the Argentine Comisión Nacional de Actividades Espaciales (National Commission on Space Activities) (CONAE) held a joint Technical Workshop in May in Buenos Aires. In

addition to updates on NOAA and CONAE satellites and systems, data applications, and

other activities, discussions were held on possible areas of future cooperation.



### **Activation of Solar X-Ray Imager**



NOAA activated the Solar X-Ray Imager (SXI), flying on the GOES-12 spacecraft. The SXI, a collaborative effort with NASA and the U.S. Air Force, is a culmination of more than twenty years of effort. It produces real-time space weather data of events such as flares and coronal mass ejections. Space weather's impacts on Earth systems include interference with short wave radio propagation, problems with electric power grids, the decay of satellite orbits, and radiation hazards for satellites and for astronauts during some phases of space missions.

### **Ongoing Search and Rescue Cooperation**



NOAA chaired the 29<sup>th</sup> Session of the Cospas-Sarsat Council, where the International Cospas-Sarsat Program Agreement was extended for five years, and participated in the 30<sup>th</sup> Session of the Cospas-Sarsat Council. Thanks to NOAA efforts, the use of personal locator beacons (PLB) in the United States is now permitted, making the Cospas-Sarsat system available to many more users. NOAA has a 90% rate of transmission within one hour of Sarsat distress alert and location information to search and rescue authorities.

### **Disaster and Hazards Support**

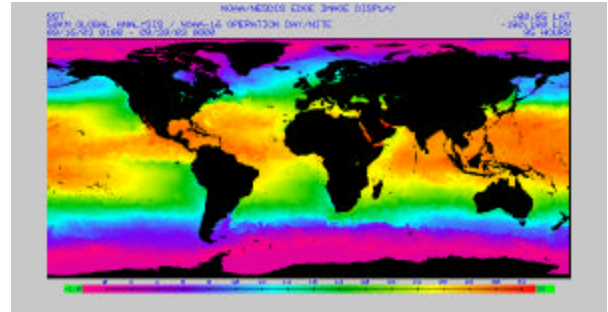
NOAA was established as a fully certified member of The International Charter: Space and Major Disasters. As the U.S. authorized user, NOAA coordinates requests from other federal agencies, and state and local emergency managers. Each agency contributes near real time Earth observation satellite data and derived-products in a coordinated response to emergency requests from authorized national and international users. NOAA completed cross-training with and certification by the European, French, Canadian, and Indian space agencies. Domestically, the U.S. Subcommittee on Disaster Reduction (SDR) continues to be revitalized, with work commissioned to identify global programs that address global risks, U.S. links to global coalitions, the disaster risks in the United States, and U.S. requirements for Synthetic Aperture Radar (SAR).

### **Improved Satellite Oceanographic Data Sets**

NOAA successfully completed the reprocessing of the complete history of sea surface temperature

(SST) data from NOAA polar-orbiting satellites to improved 4km resolution, better

cloud clearing, more accurate geographic navigation and capture of metadata, thereby responding to NOAA users' requirements for improved satellite oceanographic data sets.



### **Regional Ocean Data Cooperation**

NOAA successfully organized the first Intergovernmental Oceanographic Committee data management training session in Mazatlan, Mexico, attended by representatives from 15 Latin American and Caribbean oceanographic data centers. NOAA also hosted the Gulf of Mexico Observing Systems Conference, leading to deployment of a national structure for the Gulf of Mexico's incorporation into the U.S. Integrated Ocean Observing System.